



General Assembly

January Session, 2003

***Raised Bill No. 5165***

LCO No. 729

Referred to Committee on Government Administration and Elections

Introduced by:  
(GAE)

***AN ACT REDUCING OUTDOOR LIGHT POLLUTION AT STATE BUILDINGS AND FACILITIES.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective October 1, 2003*) (a) As used in this  
2 section:

3 (1) "Fixture" means the assembly that holds a lamp and may include  
4 an assembly housing, a mounting bracket or pole socket, a lamp  
5 holder, a ballast, a reflector or mirror and a refractor or lens;

6 (2) "Full cut-off luminaire" means a luminaire that allows no direct  
7 light emissions above a horizontal plane through the luminaire's  
8 lowest light-emitting part;

9 (3) "Glare" means direct light emitting from a luminaire that causes  
10 reduced vision or momentary blindness;

11 (4) "Illuminance" means the level of light measured at a surface;

12 (5) "Lamp" means the component of a luminaire that produces the

13 light;

14 (6) "Light trespass" means light emitted by a luminaire that shines  
15 beyond the boundaries of the property on which the luminaire is  
16 located;

17 (7) "Lumen" means a unit of measurement of luminous flux;

18 (8) "Luminaire" means the complete lighting system, including the  
19 lamp and the fixture;

20 (9) "Permanent outdoor luminaire" means any luminaire or system  
21 of luminaires that is outdoors and intended to be used for seven days  
22 or longer; and

23 (10) "State funds" means any bond revenues or any money  
24 appropriated or allocated by the General Assembly.

25 (b) Except as provided in subsection (c) of this section, no state  
26 funds shall be used to install or replace a permanent outdoor luminaire  
27 for lighting on the grounds of any state building or facility unless (1)  
28 the luminaire is designed to maximize energy conservation and to  
29 minimize light pollution, glare and light trespass, (2) the luminaire's  
30 illuminance is equal to the minimum illuminance adequate for the  
31 intended purpose of the lighting, and (3) for a luminaire with a rated  
32 output of more than one thousand eight hundred lumens, such  
33 luminaire is a full cut-off luminaire.

34 (c) The provisions of subdivision (3) of subsection (b) of this section  
35 shall not apply to luminaires on the grounds of any correctional  
36 institution or facility administered by the Commissioner of Correction.  
37 The Commissioner of Public Works, or the commissioner's designee,  
38 may waive the provisions of subdivision (3) of subsection (b) of this  
39 section with respect to luminaires on the grounds of any other state  
40 building or facility when, after a request for such a waiver has been  
41 made and reviewed, the commissioner or the commissioner's designee  
42 determines that such a waiver is necessary for the lighting application.

43 Requests for such a waiver shall be made to the commissioner or the  
44 commissioner's designee in such form as the commissioner shall  
45 prescribe and shall include, without limitation, a description of the  
46 lighting plan, a description of the efforts that have been made to  
47 comply with the provisions of subdivision (3) of subsection (b) of this  
48 section and the reasons such a waiver is necessary. In reviewing a  
49 request for such a waiver, the commissioner or the commissioner's  
50 designee shall consider design safety, costs and other factors deemed  
51 appropriate by the commissioner or the commissioner's designee.

52 (d) The provisions of this section shall not apply to the installation  
53 or replacement of luminaires for which the Secretary of the Office of  
54 Policy and Management (1) conducts a life-cycle cost analysis of one or  
55 more luminaires that meet the requirements set forth in subsection (b)  
56 of this section and one or more luminaires that do not meet such  
57 requirements, and (2) certifies that a luminaire which meets such  
58 requirements is not cost effective and is not the most appropriate  
59 alternative based on the life-cycle cost analysis.

60 Sec. 2. (*Effective from passage*) (a) There is established a Commission  
61 to Study the Extent, Causes and Consequences of Light Pollution in  
62 Connecticut.

63 (b) The commission shall consist of the following members:

64 (1) Four appointed by the speaker of the House of Representatives,  
65 one of whom shall be a member of the General Assembly, one of  
66 whom shall represent science educators at the secondary school level,  
67 and two of whom shall represent environmental organizations;

68 (2) Four appointed by the president pro tempore of the Senate, one  
69 of whom shall be a member of the General Assembly, one of whom  
70 shall represent municipal governments, and two of whom shall  
71 represent the Connecticut Dark Sky Association;

72 (3) Two appointed by the minority leader of the House of

73 Representatives, one of whom shall be a member of the General  
74 Assembly and one of whom shall represent an electric distribution  
75 company, as defined in section 16-1 of the general statutes, which has  
76 seven hundred fifty thousand or more customers;

77 (4) Two appointed by the minority leader of the Senate, one of  
78 whom shall be a member of the General Assembly and one of whom  
79 shall represent an electric distribution company, as defined in section  
80 16-1 of the general statutes, which has fewer than seven hundred fifty  
81 thousand customers;

82 (5) Five appointed by the Governor, one each of whom shall  
83 represent the professional astronomy community of the state, the  
84 amateur astronomy community of the state, the Illuminating  
85 Engineering Society of North America, the National Electrical  
86 Manufacturers Association, and state or municipal law enforcement;

87 (6) One appointed by the Commissioner of Environmental  
88 Protection, who shall be an employee of the Department of  
89 Environmental Protection;

90 (7) One appointed by the chairperson of the Public Utilities Control  
91 Authority, who shall be an employee of the authority;

92 (8) One appointed by the Commissioner of Transportation, who  
93 shall be an employee of the Department of Transportation;

94 (9) One appointed by the Commissioner of Public Works, who shall  
95 be an employee of the Department of Public Works;

96 (10) One appointed by the Connecticut Energy Advisory Board,  
97 who shall represent the board; and

98 (11) One appointed by the Connecticut Energy Conservation Board,  
99 who shall represent the board.

100 (c) All appointments to the commission shall be made no later than

101 thirty days after the effective date of this section. Any vacancy shall be  
102 filled by the appointing authority. The members of the commission  
103 shall serve without compensation. The commission shall elect a  
104 chairperson from its membership.

105 (d) The administrative staff of the joint standing committee of the  
106 General Assembly having cognizance of matters relating to  
107 government administration shall serve as administrative staff of the  
108 commission.

109 (e) The commission shall:

110 (1) Study and document the sources of light pollution in  
111 Connecticut;

112 (2) Study and document the consequences of light pollution in  
113 Connecticut, including its impact on driving safety, nocturnal fauna,  
114 astronomical research and observation, the natural beauty of the night  
115 sky, and such other consequences the commission determines are  
116 appropriate for its attention;

117 (3) Survey and document the technology and standards currently  
118 available to minimize light pollution;

119 (4) Study outdoor lighting on the grounds of state buildings and  
120 facilities and make recommendations for installing or replacing  
121 outdoor luminaires at such locations to reduce light pollution, glare  
122 and light trespass and reduce the state's costs associated with outdoor  
123 lighting;

124 (5) Estimate the potential costs and savings in the state, including  
125 the potential impact on the budgets of municipalities, associated with  
126 the adoption of lighting practices that minimize light pollution while  
127 meeting important illumination and safety lighting requirements;

128 (6) Make recommendations for public and private action to  
129 minimize light pollution in Connecticut, including, but not limited to,

130 appropriate legislation and regulation for consideration by the General  
131 Assembly and municipalities; and

132 (7) Make recommendations for documenting the state's progress in  
133 reducing light pollution, restoring the night sky, and reducing  
134 electricity use and public expense.

135 (f) Not later than February 4, 2004, the commission shall submit a  
136 preliminary report on its findings and recommendations to the  
137 General Assembly, and not later than December 1, 2004, the  
138 commission shall submit a final report on its findings and  
139 recommendations to the General Assembly. Said reports shall be  
140 submitted in accordance with the provisions of section 11-4a of the  
141 general statutes. The commission shall terminate on the date that it  
142 submits the final report or December 1, 2004, whichever is earlier.

This act shall take effect as follows:	
Section 1	<i>October 1, 2003</i>
Sec. 2	<i>from passage</i>

***GAE***      *Joint Favorable*